

AMERICAN BEE JOURNAL

46th Year

CHICAGO, ILL., AUG. 16, 1906

No. 33



Aplary of an Amateur—L. L. Whitson, of Blue Island, Ill.
(See page 702)

American Bee Journal



PUBLISHED WEEKLY BY
GEORGE W. YORK & COMPANY
 334 Dearborn Street, Chicago, Ill.

IMPORTANT NOTICES.

THE SUBSCRIPTION PRICE of this Journal is \$1.00 a year, in the United States, Canada, and Mexico; all other countries in the Postal Union, 50 cents a year extra for postage. Sample copy free.

THE WRAPPER-LABEL DATE indicates the end of the month to which your subscription is paid. For instance, "dec 06" on your label shows that it is paid to the end of December, 1906.

SUBSCRIPTION RECEIPTS.—We do not send a receipt for money sent us to pay subscription, but change the date on your wrapper-label, which shows that the money has been received and credited.

Advertising Rate, per Aagate Line, 10c.

14 lines make one inch.
 Nothing less than 1/4 inch accepted.

Time Discounts.		Space Discounts.	
4 times....	5 per cent	100 lines... 5 per cent	
13 ".....	10 "	500 "..... 10 "	
26 ".....	20 "	1000 "..... 20 "	
52 ".....	30 "	2000 "..... 30 "	

These rates are subject to either time or space discounts, at choice, but not both.
 Reading Notices, 25 cents, count line, subject to the above discounts.

Goes to press Monday morning.

National Bee-Keepers' Association

Objects of the Association.

- 1st.—To promote the interests of its members.
- 2d.—To protect and defend its members in their lawful rights.
- 3d.—To enforce laws against the adulteration of honey.

Annual Membership Dues, \$1.00.

General Manager and Treasurer—
 N. E. FRANCE, Platteville, Wis.

If more convenient, Dues may be sent to the publishers of the American Bee Journal.

65c for 12 Names For names and P. O. of 12 farmers and 15c—stamps taken—we will send for 2 yrs. the Farmer's Call—reg. sub. price 40c a year. F. C. is a wkly., 25 years old, 1,300 pages a year. Sample free.
 FARMER'S CALL, Quincy, Ill.

We Manufacture the Finest, Whitest No-Drip, Basswood Shipping-Case

on the market to-day. Covers and bottoms are of One Piece. Everything is Polished on both sides, and a better case cannot be had at any price.

We can furnish them in single or car-load lots to fit any number or style of section. Large quantities of all the standard sizes on hand.

As a special offer, we will sell you 25 cases to hold 24 sections, complete with Nails, Paper and Glass, at \$4.00. Write for prices on larger quantities. Can furnish corrugated paper if desired.

We can furnish you with anything you need in the apiary. Our Catalog is free.

Prompt Shipment and Satisfaction Guaranteed

Minnesota Bee-Keepers' Supply Co.

Nicollet Island, No. 33.

MINNEAPOLIS, MINN.

Mention Bee Journal when writing.

THE AMERICAN FOOD LABORATORY

E. N. EATON, M.Sc., Chemist.
 4 years State Chemist, Minnesota.
 6 years State Analyst, Illinois.
 1235-1248 Caxton Building,
 334 Dearborn Street, Chicago, Ill.
 Samples of Honey analyzed. Correspondence solicited.

Now is the time to Re-queen.

Leather-Colored Italian QUEENS
 by return mail. Safe arrival. Red Clover strain.
 \$1.00. A. W. YATES,
 3242t 3 Chapman Street, HARTFORD, CONN.

Please mention Bee Journal when writing advertisers.

DO YOU KNOW

THAT THE SALE OF

DITTMER'S FOUNDATION

Has increased so much that we were forced to double our melting capacity in order to fill orders promptly!

There is a Reason for This—It is because DITTMER'S FOUNDATION is tough, clear, and transparent, and has the natural odor of beeswax.

Agents for Dittmer's Foundation:

W. D. SOPER, Jackson, Mich. E. H. TAYLOR, Welwyn Station, Herts, Eng.
 BEE & HONEY Co., Beeville, Tex. E. GRAINGER & Co., Toronto, Ont., Canada.

Our warehouse is well stocked with all kinds of Bee-Keepers' Supplies. Beeswax always wanted.

GUS DITTMER, Augusta, Wis.

NOT IN THE TRUST



FRICITION TOP CANS
 FOR HONEY AND SYRUP

We will stamp your Cans "PURE EXTRACTED HONEY"—FREE

Our prices for 1906 are the lowest to the National Bee-Keepers' Association. Write us.

Now is the time TO BUY

Canners Can Co.

1035 W. 47th St., CHICAGO, ILL.

Mention Bee Journal when writing.

"DADANT'S FOUNDATION"

IT EXCELS

EVERY INCH equal to sample

Beauty, Purity, Firmness.

No Sagging, No Loss.

Twenty-seven Years of Experience.

We Guarantee Satisfaction.

WAX WORKED INTO FOUNDATION

BEE-SUPPLIES of all kinds.

Beeswax Wanted at all times...



DADANT & SONS, Hamilton, Ill.

SEND FOR OUR CATALOG



BY RETURN MAIL Fine Italian Queens

Bred to the highest standard of honey-gathering and hardiness. No disease. Quality, promptness, safe arrival and absolute satisfaction guaranteed.

	1 Queen	2 Queens	4 Queens	6 Queens
Untested\$.60	\$1.20	\$2.40	\$3.60
Tested (or Warranted Tested)	1.00	1.90	3.75	5.50

Select Tested (for breeding purposes) \$2.00 each—no discount. It is not mine to command your favors—I'll do more, I'll merit them. May I ask a trial order?

CHAS. M. DARROW—R.F.D. No. 1—Box 19—Milo, Mo.

Mention Bee Journal when writing.

31Atf

BEE-SUPPLIES Lewis Goods at Factory Prices...

Best of everything the bee-keeper needs. Large and complete stock. Fine Italian and Caucasian Queens. Prompt service. Catalog free. Get our prices before you order elsewhere.

C. M. SCOTT & CO.

29Atf

1004 EAST WASH. STREET, INDIANAPOLIS, IND.

Fire Sale of Bee and Poultry Supplies

Come or send and **Save 25 to 50 Percent** on slightly damaged goods.

New Lewis Goods at Factory Prices, by Return Freight.

Any bee-keeper living within a reasonable distance of Chicago can make money on any Supplies he may need now or later, by coming to Chicago and looking over the goods that we selected out after the fire. Better order quick, if you want any of the goods we are selling at 25 to 50 percent reduction.

Send for list of Slightly Damaged Goods to select from at Reduced Prices.

Golden Italian or Red Clover Queens by return mail. Untested, 75c; Select Untested Queens, \$1; Tested, \$1.25; Select Tested, \$2.25. Full Colonies in up-to-date hives, and Nuclei, for sale.

H. M. ARND, Proprietor, York Honey and Bee-Supply Co. (Not Inc.)

Long Distance Telephone, North 1559. 191 AND 193 SUPERIOR ST. CHICAGO, ILL.
(Three blocks north and one block east of our old location.)

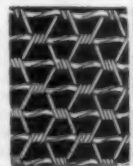
The Rietsche Press

Made of artificial stone. Practically indestructible, and giving entirely satisfactory results. Comb foundation made easily and quickly at less than half the cost of buying from the dealers. Price of Press, \$1.50—cash with order. Address,

ADRIAN GETAZ,

45Atf KNOXVILLE, TENN.

J.G. Goodner, of this State, writes me that "he prefers to pay \$25.00 for a Rietsche Press rather than do without it."—A. G.



FENCE Strongest Made

Made of High Carbon coiled wire. We have no agents. Sell direct to user at factory prices on 30 days free trial. We pay all freight. Catalog shows 37 styles and heights of farm and poultry fence. It's free. Buy direct. Write today

COILED SPRING FENCE CO.

Box 80 WINCHESTER, INDIANA.

If you want the Bee-Book

That covers the whole Apicultural Field more completely than any other published, send \$1.20 to

Prof. A. J. Cook, Claremont, Cal.,

FOR HIS

"Bee-Keeper's Guide."

Liberal Discounts to the Trade.



Big Profits in Capons

Caponizing is easy—soon learned. Complete outfit with free instructions postpaid \$2.50.

Gape Worm Extractor 25c
Poultry Marker.....25c
French Killing Knife 50c
Capon Book Free.

G. P. Filling & Son,

Philadelphia, Pa.

Mention Bee Journal when writing.

American Bee Journal

Liberal Combination Offers

The following liberal offers are made—**GLEANINGS** and the articles named—at a very low combination rate. You may take advantage of these offers whether you are a new subscriber or old.

- GLEANINGS** one year and the **A B C OF BEE CULTURE**, postpaid..... \$2.00
The leading Textbook on bee-keeping, by A. I. and E. R. Root.
- GLEANINGS** one year and **HOW TO KEEP BEES**, postpaid.....\$2.00
This is a very delightful and instructive book by Anna Botsford Comstock. Highly recommended as a not-too-deep manual.
- GLEANINGS** one year and **SCIENTIFIC QUEEN-REARING**, postpaid.....\$1.75
A standard work on queen-rearing, by G. M. Doolittle—originator of the Doolittle system of queen-rearing and one of the most successful queen-breeders in the country.
- GLEANINGS** one year and **FARMING MAGAZINE** (Monthly) postpaid.....\$1.50
A very valuable publication for farmers. Published by the Doubleday-Page Company, publishers of Country Life, Garden Magazine, World's Work, etc. Easily the leader among agricultural publications. Sample copies free upon request.
- GLEANINGS** one year and a **BEE-KEEPER'S POCKET-KNIFE TOOL-KIT**.....\$2 10
A very neat, leather, pocket tool-case containing a fine pocket-knife and five detachable tools. Made of the very best steel and sells regularly for \$2 25. A handy tool.
- GLEANINGS** one year and a **RED CLOVER QUEEN**, postpaid.....\$1.50
- GLEANINGS** one year and a **STANDARD CORNEIL SMOKER**, postpaid..... 1.85

Questions in regard to any of these combinations will be gladly answered.
Send for the new **GLEANINGS'** booklet, **THE BEE LINE TO PROFIT**.

GLEANINGS IN BEE CULTURE, Medina, Ohio.

PROMPT SHIPMENTS

At this season of the year Supplies are wanted without delay. The crop is being harvested and must be put up for market. Shipping-cases and honey-packages of all kinds are in demand. We are in position to fill your orders with the greatest promptness. With full stocks at all branch houses and agents everywhere fully stocked, your order has best possible attention. Look over list below and find the branch or agent from whom you can obtain Root's Goods quickest and at the least transportation charges.

SOME SPECIAL SEASONABLE SUPPLIES

Five-Gallon Square Cans

This is the favorite package for shipping extracted honey. There can be no shrinkage and consequent leakage, no talut to the honey as is often the case with wooden packages. The cans being square, economize space and are easily boxed.

As we have an overstock of cans for honey we make the following special prices on cans from Medina, to reduce stock. If ordered from any of our branches or agencies east of the Missouri River, add 5c a box or 50c per 100 cans to cover freight to those points.

No in a box	Capacity of each Can		Price of		Weight of 1 box
	In gallons	In honey	1 box	10 boxes	
1	5-gallon can boxed.....	60 pounds	\$ 50	\$ 4 50	10 lbs.
2	5 gallon ".....	60 "	75	7 00	15 lbs.
10	1-gallon ".....	12 "	1 25	12 07	20 lbs.
12	3/4-gallon ".....	6 "	1 25	12 00	20 lbs.
24	3/4-gallon ".....	3 "	1 75	16 50	25 lbs.
100	1-gallon ".....	12 "	10 00	95 00	110 lbs.
100	3/4-gallon ".....	6 "	8 00	75 00	80 lbs.
100	3/4-gallon ".....	3 "	6 00	55 00	60 lbs.

In lots of 50 boxes or over we will furnish the 60-lb. cans, two in a case, at 65c a box.

Half-pound Tumblers

These are to supply the increasing demand for a cheap jar for holding one-half pound honey and retailing for 10c. We can supply these tumblers at \$4 a barrel holding 24 dozen. For less than a barrel we will repack for 25c per dozen, or put them up 4 dozen in a case ready to be reshipped when filled at \$1 per case; 10-case lots at 95c. At present these are in stock only at Medina.

No. 25 Glass Jar

This is a very neat, clear glass jar holding 1 pound of honey. We have sold this jar for years and in larger quantities than any other. Put up in reshipping cases of 2 dozen each. Prices same as the Simplex Jar.

Simplex Jar

The handsomest glass package on the market. Your honey in this package will find a place among the finest novelties on the grocery shelves. Create a demand for your honey by packing in the best possible manner.

We are now prepared to offer the Simplex and the No. 25 Jar put up in partitioned reshipping cases of 2 dozen each at \$1 per case; 10-case lots at 95c per case.

Address branch nearest you.

THE A. I. ROOT CO., Factory and Main Office, Medina, Ohio

—BRANCHES—

Medina, New York City, Chicago, Ill. Philadelphia, Pa. Washington, D.C. St. Paul, Minn. Syracuse, N.Y. Mechanic Falls
Ohio. Box 1037 144 E. Erie. 10 Vine St. 1100 Md. Ave. 1024 Miss. St. 1631 W. Gen. St. Maine.



(Entered at the Post-Office at Chicago as Second-Class Mail-Matter.)

Published Weekly at \$1.00 a Year, by George W. York & Co., 334 Dearborn Street.

GEORGE W. YORK, Editor

CHICAGO, ILL., AUGUST 16, 1906

Vol XLVI—No. 33



Keep Up Your Membership in the National

If you should allow your fire insurance to expire, and the day after its expiration your house were to burn down, you would not expect to get any insurance; or if you should expect it you would be disappointed, for no fire insurance company would pay anything on an expired policy. Even if you should renew the day after the fire, that wouldn't help the case a particle; to be of any avail the policy must be in force at the time of the fire. Most persons understand this, but some seem to think that the same does not hold in the case of their membership in the National Bee-Keepers' Association. Why should there be any difference? If you do not make your annual payment promptly before your membership expires, and the day after it expires some accident with bees occurs in which you need the help of the National, what right have you to expect it? The only safe way is to keep your membership paid up.

Drone-Cells for Queen-Cell Cups

Some who would like to try the Doolittle plan of rearing queens are deterred by the lack of the artificially prepared cups. L. B. Smith says he prefers drone-cells, and thus gives in the Rural Bee-Keeper his plan of proceeding:

To rear good queens without dipping or compressed cell-cups, go to any colony that you know has some old black drone-comb (the older the better) that the bees have polished up for the queen to lay in. Cut this out (and you might replace it with worker-comb while you are at it), and cut it into strips of one row of cells each. If there are eggs or newly-hatched larvae in them they must be destroyed or the bees will build over them. Now attach these strips of drone-comb to the cell-bar with melted beeswax, as

you would the artificial cell-cups; cells pointing down when the cell-bar is in position. Take a thin-bladed sharp knife (it is best to have the knife hot) and trim the row of cells a little more than half-way down. This done, flare the mouth of every third cell on the cell-bar, by pressing the rubber end of a common lead-pencil in it. This will cause them to look very much like queen-cells just started. You can prime these with royal jelly like the artificial cell-cups if you wish, but I find that of no use.

Now go to the breeder, lift out the little larvae and place them in these prepared cells. Hang the frame in the cell-building colony, and these cells will be accepted and built out the same as any queen-cells. This old, thick, black drone-comb makes a good, heavy base for the cells, and is far superior to any artificial cell-cups for my use. I use drone-comb altogether now.

No Glucose Comb Honey

Mr. Ernest W. Reid, of Lemon, Mich., wrote us as follows on Aug. 6:

EDITOR AMERICAN BEE JOURNAL—

Dear Sir:—On July 28, I mailed you a copy of the Flint Daily Journal of July 25, containing a picture which represented, among the other adulterated foods, a section of comb honey. I stated that I would make some experiments in order to ascertain whether or not bees would take glucose, and that if they failed to take it I would write the editor as best I could regarding the matter. I failed in inducing the bees to take the glucose, and I am enclosing the letter written to the editor, and which he published.

I believe it would be a good thing to have available for publication by the various newspapers, etc., that print fibs about honey, reports from the several agricultural departments, showing that their experiments have failed in getting bees to take glucose.

I would very much like to hear through the columns of the American Bee Journal about the experiments of others in feeding bees glucose. I suppose there are none who have succeeded in getting the bees to take it, yet if by any possibility they will take some brands or kinds, then it is best for bee-keepers

to know about it, as, of course, it would not do to publish that bees never take it if the opposite is sometimes the case.

ERNEST W. REID.

The letter published in the Flint Daily Journal from Mr. Reid, is as follows:

In the Daily Journal of July 25, in the picture on the front page, I notice among the other articles of adulterated food a section of comb honey labeled, "Glucose Honey." I wished to write immediately in regard to the matter, but wanted to try some experiments to determine whether or not bees would take glucose; that is, I wished to be able to say to the public that I had tried the experiments personally.

For the last 10 years I have been a close observer and a constant reader of many of the books and journals devoted to bees and honey, and was thoroughly convinced bees would not take glucose, and now have tried the several experiments and have utterly failed to induce the bees to take the stuff.

Several years ago a canard was started about comb honey being made by machinery; combs made by machinery, filled with glucose and sealed, all done by machinery. This yarn has so often been refuted that the well-informed thinking public do not for a moment give it credence, and as the bees will not store the glucose, the simple fact remains that there is no glucose comb honey in existence.

There has been an enormous amount of harm done the bee-keeping industry by the misrepresentations about honey, thus lessening the consumption of one of the most delicious and nutritious foods placed upon the market.

If you would kindly publish the above, or place the facts before your readers in some way, it would be appreciated.

Very respectfully yours,

ERNEST W. REID.

Flint, Mich., July 31, 1906.

We wish to commend Mr. Reid on what he has done in this matter. He followed it up, and succeeded in having the truth about comb honey published where appeared only a picture misrepresenting comb honey.

It seems that there are many newspapers that are willing to publish that comb honey is manufactured, the comb being made, filled with glucose and sealed over, all being done by machinery. In some cases it is stated that bee-keepers feed glucose to their bees and thus produce the so-called honey. Of course, the public knows nothing whatever about honey-production, and so can not be blamed very much for believing what they read concerning it. Also, they have read so many times during the past 25 years that com

American Bee Journal

honey is manufactured without the aid of bees, that they have come to believe that it is true. All bee-keepers know that comb honey has never been produced except by bees.

It is true, however, that a certain small bee-keeper in the East published about a year ago an article with illustrations, endeavoring to prove that regular honey-comb was manufactured something like 30 years ago. In fact, he seemed to attempt to defend the misrepresentations first given to the public by Mr. Wiley over 25 years ago. All that was ever made was simply deep-cell comb foundation. Something like that was experimented with a few years ago at the expense of about \$2000, and then was discontinued, the dies, etc., being destroyed. It was not a financial success, and so nothing further was done with it or said about it. Even if a single

pound of machine-made honey could be produced how foolish it would be to continue to refer to it when not a commercial success, as, of course, its manufacture would not be continued, and so of course none of it would be found on the market to compete with the genuine comb honey produced by the bees.

The Temper of Hybrid Bees

The Irish Bee Journal tells an inquirer that the first cross between Italians and blacks "results in bees of uncertain temper, and sometimes difficult to handle," but "the characteristics show less uncertainty of temper with succeeding crosses." Is it not the other way in this country? Certainly some have reported that viciousness of disposition has increased with succeeding generations. How is it with others?

tons, neither would all care to remain amateurs like Mr. Whitson and many others. However, in a season like the present in many localities the amateur has just as much surplus honey as the extensive bee-keeper, and he has not nearly so much invested in the business; hence, not so much to risk. Of course, in a good season like that of 1903, the amateur is scarcely to be mentioned in the same day with the bee-keeper who has hundreds of colonies, when it comes to quantity of surplus honey. However, we wish all of them success—both the small amateurs and the large specialists.

The West Michigan State Fair is to be held at Grand Rapids, Sept. 10 to 14, inclusive. Mr. A. G. Woodman is the superintendent of the apiarian department, which insures its being a success. The following is the liberal premium-list:

	1st.	2d.	3d.
Nuclei hybrid bees.....	\$ 6	\$ 2	\$ 1
Nuclei Italian bees.....	3	2	1
Nuclei of Carniolan bees.....	3	2	1
Display of 3 different strains of bees.....	3	2	1
Queen-rearing nuclei, showing frame of queen-cells.....	5	3	2
Specimens of comb honey—not less than 10 lbs.—quality and manner of putting up for market to be considered.....	5	3	2
Display of comb honey—appearance, quality and condition for market to govern.....	25	15	10
Specimens of extracted honey—not less than 10 lbs.—quality and manner of putting up for market to be considered.....	4	3	2
Display of extracted honey—quantity, quality, condition for market and arrangement to govern.....	20	10	5
Beeswax—specimen not less than 10 pounds.....	3	2	1
Most attractive display of honey-producing plants, pressed, mounted and named.....	3	2	1
Largest number of samples of different kinds of honey—each named.....	2	1	
Largest, best, most interesting and instructive exhibit in the department.....	15	10	6

The exhibition of all kinds of implements and bee-keepers' supplies is invited, for which space will be provided. Diploma given to best exhibit.

All strains of bees to be bred by exhibitor, and plainly labeled and placed in observatory hives, appearance of hive to be considered.

Entries close Saturday, Sept. 1, 1906. Nuclei must be exhibited in such shape as to be seen on at least two sides.

All honey to be the product of the exhibitor, and to be product of 1906.

Those desiring further information can address A. G. Woodman, Grand Rapids, Mich.

Hawks and Clover-Blossoms.—We find the following paragraph in one of the magazines under the heading, "Don't Kill the Hawks," taken from Country Life in America:

Man has sinned more than any other animal in trifling with Nature's balance. Clover crops and the killing of hawks are apparently unrelated, yet the hawks eat the field-mice, the field-mice prey on the immature bees, and the bees fertilize the clover-blossoms. The death of a hawk means an over-increase of field-mice and a consequent destruction of the bees.

Quirin's Queen Advertisement appears on page 707. The testimonials are interesting, being unsolicited.



The Washington State Bee-Keepers' Association is officered by the following: Anson White, President; Arthur Hanson, Vice-President; William P. Clarke, Treasurer; and Virgil Sires, of North Yakima, Secretary.

Fifty Years a Bee Keeper.—Geo. S. Wheeler, of New Ipswich, N. H., wrote us as follows lately, when renewing his subscription for another year:

"I am always interested in the 'old reliable' American Bee Journal, having had it to read on and off since it was published in Washington, D. C. This is my 51st year in bee-keeping, it having been 50 years on June 22 since I had my first swarm."

The Apiary of L. L. Whitson, of Blue Island, Ill., is shown on the first page this week. When sending the photograph, early last spring, Mr. W. wrote as follows:

EDITOR AMERICAN BEE JOURNAL:—I am mailing you a photograph of my small apiary of 7 colonies. It also shows the bee-house attached to the barn. I built it just like an ice-house, for the purpose of wintering the bees and using it for a work-house in summer.

My place is located in the city, and I can't keep any more than 8 or 10 colonies. I expect some time to locate where I can have a place for a few hundred colonies.

Two of the hives shown, Nos. 10 and 12, I moved on July 12, 1905, both being swarms a few weeks before. By moving them over 1½ miles I thought I would surely lose them, but such was not the case. No. 10 gave me 21 pounds of honey, and was in good condition. No. 12 was good and strong in the fall.

This will be my third year as an amateur bee-keeper, and I have received most of my information from the American Bee Journal.

L. L. WHITSON.

There are many amateur bee-keepers in this country who are deriving not only considerable pleasure from their bees, but also quite

a little honey. One of the most successful bee-keeping amateurs we ever heard of, lived in Chicago some years ago. He owned a 25-foot lot, and on the back of it kept his bees. He averaged something like 100 pounds of comb honey per colony about the third year, from 8 or 10 colonies. He was employed in a bank during the day, and cared for his bees mornings and evenings. The honey was gathered mostly from sweet clover, of which there was a large supply within easy distance from his apiary.

Mr. Whitson certainly has a very neat little bee-yard, and some day, should he locate where he can have several hundred colonies, as he mentions, no doubt he will become one of the leading bee-keepers of this country. Nearly every one who succeeds in any calling begins in a small way, and increases his business with his experience. This is the safest way. "Slow, but sure" is best.

Father Langstroth—the inventor of the movable frame which so revolutionized bee-keeping in this country—never was an extensive bee-keeper, and yet he wrote the best book on bees that had appeared up to his time. While large numbers of colonies are all right for gaining certain kinds of experience, it is often from a smaller number that special investigations and experiments can be conducted most successfully. The bee-keeper who numbers his colonies by the thousands, and his apiaries by the tens, often has not the time to conduct experiments or discover certain valuable things. Many interesting things can be learned from the manipulation of less than 10 colonies. Of course, it may not be considered commercial bee-keeping, nevertheless it is all right. The extensive bee-keepers, as well as the smaller ones, are all needed to constitute the apicultural business as it exists to-day. All can not be Capt. Hethering-



No. 16—Dadant Methods of Honey-Production

BY C. P. DADANT

The editorial on page 593 calls to my mind the question of ventilation in reference to swarming.

Ventilation of the bee-hive is a question on which people differ almost as much as they do on wintering, and for a similar reason—the difference in location. There are countries and localities where ventilation is of much less importance, because of a milder temperature. Between the location of Doolittle and Holtermann, for instance, there is quite a difference, and there is another difference between that of Doolittle and my own. I have read statements from European writers with which I could not at all agree, because they were writing for countries where the thermometer never ranges above 80 degrees Fahr.

If there is a difference between one locality and another, there is also a difference between one summer and another. I will take the liberty of telling some of my experiences to illustrate how great these differences may be.

During the summer of 1877 we had an out-apiary of some 75 colonies 5 miles north of our home. The owner of the farm had left, and his house was occupied by an old man with his wife and 2 or 3 young children. The hives were in an orchard, partly shaded by apple-trees, partly exposed to the sun. At that time we had not begun using any roofs over the hives, neither had we any straw-mats, such as we now use over the combs. During July the bees harvested quite a crop of honey, and the weather became very sultry. One day I received information from the tenant that the bees were in an uproar, which had already lasted for 2 days. I hastened to the apiary and found that the combs had melted down in a number of hives; in some instances only one comb had broken down, but in 6 or 8 cases every comb had been melted by the heat, and when I arrived those colonies were entirely ruined. There were whole rows of hives in which not a colony was safe from this mishap. I valued the loss at over \$100. The hives had entrances about 8 inches long, but evidently the heat had compelled the bees to cluster on the outside, and in some cases the cluster had very probably hung partly in front of the ventilating space.

This taught me a lesson which I never forgot. But those bees had gone through the swarming month—June—without suffering from the lack of ventilation, and without much swarming.

After that, for a few years, we fell into the opposite extreme. We formed the habit of lifting the hives from the

bottom-board 2 or 3 inches for hot weather. In addition we moved the surplus cases back so as to give a bee-space and an egress at the top of the brood-combs as well as at the bottom. This did very well in hot summers, but we soon found out that in many summers so much ventilation is injurious. In fact, I found hives whose bees were closing the upper ventilation by filling the space with lumps of propolis. This was clear evidence that the bees thought the matter was overdone. When the hives were left too long with this upper ventilation, the bees would remove both the honey and the brood from the upper opening, and a considerable space of the brood-combs was practically abandoned by the bees.

Of late years we have allowed ourselves to be guided entirely by the behavior of the bees. When they are hanging on the outside—"making a beard," as the French say—we conclude that they are uncomfortable, and we at once enlarge the entrance. If the enlargement of the bottom entrance is not sufficient, we make an opening at the top of the brood-chamber by setting the supers back a little, so as to leave an open passage of a quarter inch on the end of the frames. But this remains only while the bees are hanging out and while the harvest continues, for we do not think it worth while to keep this space open after the end of the clover crop, the bees having but little to do and being likely to cluster on the outside, anyhow, if very numerous. In cool summers, when the nights are not unpleasantly hot, we abstain from giving upward ventilation.

A very clear proof that ventilation may be overdone when the nights are comparatively cool, as they have been this summer, is shown in the fact that the bees keep the honey away from the cool spots. We use an enamel cloth and a straw-mat over the combs, and if the enamel cloth happens to have a hole in it this is sufficient to make a very slight amount of ventilation through the mat at that spot. In a cool summer the bees remove their honey from such spots, even though they may be over the center of the brood combs.

That makes it clear to me that they consider even this small amount of ventilation as objectionable, while a lower ventilation does not seem to have any bad effects at all.

The reader will then see that this matter of ventilation is of necessity to be adjusted according to the greater or less heat of the temperature. The ventilation needed in our hot summers in the Mississippi Valley would at all times be superfluous in the mountainous countries like Switzerland, or in mild climates like that of England. The amount of

ventilation sufficient in Canada would, on the contrary, be entirely inadequate here.

Now, as to ventilation for the prevention of swarming. It is easily perceived that if we have a hot season at the time of swarming—a condition that will require of the bees their clustering on the outside during a part of the day—the tendency to swarm will be very much increased. On the other hand, we may have very pleasant weather at the same time as a good honey-flow, and without warning our bees may swarm because of want of empty combs, when all the ventilation that could be judiciously given would be of no avail.

The best swarms are cast early in the season, when an ordinary and sufficient flight-opening is all that can be expected among the requirements. I, therefore, think that ventilation in plenty is *not* the most important requirement. But it is *one* of the requirements.

It has been said that an upper opening will prevent swarming. I believe it will, if the amount of room for storing the crop is sufficient. I do not believe that it would of itself prevent swarming, unless this ventilation was carried to such extremes as to make the bees uncomfortable, in which case there might be great danger of having some of the brood chilled.

So I think we may lay down the rule that additional ventilation and shade must be given, as a preventive of swarming whenever the bees show that they are crowded, or are uncomfortable by lying on the outside of the hive. This clustering out is never an evidence that the combs are filled, neither is it an evidence that the hive is full of combs, but only proof that the interior of the hive is unpleasantly warm for its inhabitants; and if we would avoid swarming, we must make their home comfortable.

Hamilton, Ill.

T Supers—Their Construction and Use

BY J. C. ARMSTRONG

I believe I can describe the T super I use by the cut of yours as given on page 642. I don't care whether any other bee-keeper uses it or not, only that if others use it the supply-dealers will keep it in store. Whenever I want a supply of them I have to send a sample to the factory, which costs me 50 cents every time besides the super, which I never get back.

Taking your model: The side from you is 20 inches long, $\frac{3}{4}$ inch thick, and $4\frac{1}{4}$ inches wide. Then it is sunk back $\frac{1}{4}$ of an inch at each edge. The side next to you is the same width, made out of $\frac{1}{2}$ -inch stuff and divided in the middle. The upper half is loose, and is fastened at the end by a button which turns around the corner when put up. The end pieces are 13 inches long and $\frac{1}{2}$ inch thick, and $4\frac{1}{4}$ inches wide. It will then be the same as the sides, omitting strips as on the side.

On each end on the inside is nailed a strip $\frac{1}{2}$ inch thick and $4\frac{1}{4}$ inches wide.

Instead of the supports for the tins as shown in yours, a strip $\frac{1}{2}$ of a bee-space runs the whole length of the super, and is halved into the end pieces, and is $\frac{1}{4}$

American Bee Journal

wide. On the side next to you is another the same. These form the supports for the tins. One side of the end tins slips on top of the inside end pieces, and under the ends of the side strips. The T's are $12\frac{1}{2}$ inches long for 8-frame hives.

These side strips want to be half of a bee-space thick, and when tiered up there will be a bee-space between them. The last lot I got I forgot to give instructions, and they were made a bee-space thick, and when tiered up made two bee-spaces, and the bees will build brace-combs between them. I use 10 tins to a super, 5 below and 5 above. If the cracks between the sections are not covered by tins the bees will glue them up. After filling up with sections and separators, I put a $\frac{1}{4}$ -inch strip and then a wedge strip at the ends to tighten up, and when all is put together you would not know which was the top or bottom except by the buttons. I have one of your kind. The tins are supported by bent wires, but I never used it much. One difficulty I saw in it was in getting these supports in the right place—either too high or too low, or the right distances apart laterally, while in mine the sections are bound to come together regularly. I slip the end tin, then put in the corner section. Slip the next tin up to it, then the next section, then the tin, and so on until filled up.

I think if Elvin Armstrong had not gone out of the business after getting up his hives and super, he would have brought them into use. I don't favor this super because its inventor was an Armstrong, for he is no relative of mine, or if so it is so far back that it doesn't count.

Marshalltown, Iowa.

Dr. Miller, to whom the foregoing was addressed, comments as follows:

I don't fully understand your difficulty in using the T super, but plainly it is from a wrong use of a right thing; and that's probably the case with all who have tried the T super and found it unsatisfactory. You say one difficulty is in getting the supports in the right place; either too high or too low. There is just one place where the supports that hold up the T tins should be, and there ought not to be the slightest difficulty in having them exactly in the right place. I suspect that you have made the mistake of having the supports $\frac{1}{4}$ inch above the bottom of the super, making a bee-space under the sections. Instead of that the bee-space is at the top of the super. Set a super filled with sections on a table, and the sections should rest down upon the table. That, you will see, makes the supports exactly flush with the bottom of the super. If a square piece of sheet-iron is used as a support, it is nailed flat upon the under edge of the super, so that when the super rests upon a table the support rests flat upon the table. If a bent staple is used, it must also lie flat upon the table, when finished. Possibly there may be a better way, but here's the way I have put in the staples: Lay the super upside down before you, drive the staple down vertically deep enough to have a good hold, putting it about $\frac{1}{4}$ inch from the inner edge, and then bend the staple over at right angles, and hammer it down so that when the super

is turned right side up the staple will rest flat on the table.

As to getting the staple at the right place laterally, there ought to be no difficulty. On each side there are 3 supports. The middle of the middle support comes exactly at the middle of the super, measuring inside. Then half way between the center and the inner end of the super is the right spot for each of the other supports. Nothing difficult about that, surely.

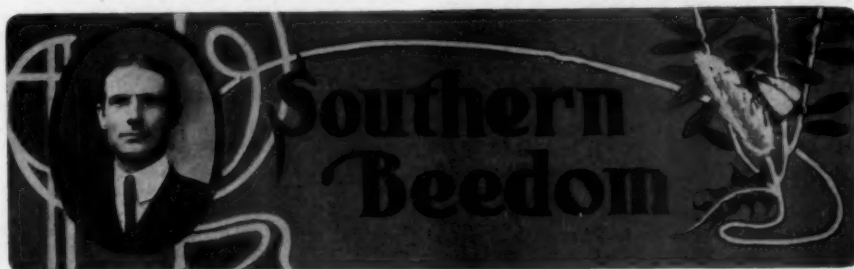
With regard to filling the super with sections, it would be hard to find anything easier. I can put 24 sections in a super in less time than I can set 24 sections on a table. If you set a section on a table, at least a little care must be used or it will topple over. And when you set a second one beside it, there is

danger of pushing the first one out of place. In the super no such care is needed. The sections can be almost thrown in. When the first row is put in, a tin is shoved under, when the second row is in, the second T tin is shoved under, and the third T tin after the third row. But, of course, to do this a "super filler" must be used, as described on page 148 of "Forty Years Among the Bees." If any one hasn't the book, and wants to know how to make a super-filler, I'll give the description later.

As I have said before, I have no personal interest in the T super; it is not my invention; but for one who knows how to use it, I don't believe a better super has yet been devised.

Marango, Ill.

C. C. MILLER.



Conducted by LOUIS H. SCHOLL, New Braunfels, Tex.

Some New Experiences—Some Nuts for the Veterans to Crack

I find with more than 20 years' experience that one will continually be having new experiences with the bees, as we shall see from what follows:

I had a very strong colony of hybrid bees in the home apiary that I had secured from the woods. I had not destroyed their queen and replaced her with an Italian, as is my custom, as her bees were extra-good workers. The season up to about June 10 was very poor for bees. In fact, it was, and is yet, the hardest year I ever saw for bees. But about the above date the mesquite furnished a light honey-flow, and all the bees in the apiary were making a rush for the bloom by the time it was light in the morning.

But this hybrid colony was doing nothing whatever, which was a great surprise to me, as I knew they were about the strongest colony in the yard, and hybrids were usually the best workers. They were just hanging clustered in front of the hive doing nothing. So I decided to give them a good feed that night to start them to work. I prepared it of the best granulated sugar, but to my surprise they refused to take the feed, and allowed it to stay in the hive and sour. This caused me to open the hive and make a careful examination. The old bees seemed to be in perfect health, and were ready to sting on short notice, as was their custom. They had a good supply of stores of both honey and pollen, and plenty of hatching brood, but every cell of the unsealed brood was dead, and the bees had not attempted to remove any of this dead brood, which had apparently just dried

up and died. There was no bad smell about the hive or combs, and none of the sealed brood was dead so far as I could discover; the unsealed brood had not turned brown or dark as "foul brood" is said to do when bees are afflicted with that disease. The dead larvae still looked white, but was settled down in the bottom of the cells, dry and hard, and had died, seemingly, of starvation.

I requeened them with a young Italian queen, and now they have cleaned up their combs and gone to work after a rest of about 10 days, and the light honey-flow they might have taken advantage of has passed. This is a new experience to me, and I should like to have the comments of such men as Dr. C. C. Miller, G. M. Doolittle, L. Stachelhausen, and other bee-experts, on this case, through the columns of the American Bee Journal.

NEW EXPERIENCE No. 2.

I removed the queen of a good, strong 3-frame nucleus, leaving eggs and brood in all stages of development with the colony. After 24 hours had elapsed I gave them a ripe queen-cell which hatched in due time. After a few hours the bees commenced "balling" the young queen. I caged her, and she remained in the cage at least 48 hours before the bees released her; but she was promptly destroyed by the bees.

Nothing so very strange about the above, but here is the strange part of it to me: These bees never started a single queen-cell during all this time, and plenty of honey and pollen was coming in from the fields at the time. Now all the brood is capped, and no queen-cells yet, and no laying workers have developed. I left them for the

American Bee Journal

sake of experiment. I had read of cases like the above, but had always supposed it to be some novice writing, and that there was some mistake somewhere.

NEW EXPERIENCE NO. 3.

On June 8, while I was at one of my out-apiaries, a very large swarm issued from a colony I had been feeding heavily for the purpose of securing a lot of choice drones in the home apiary. They made a direct line for the woods without stopping to cluster or look for their queen that had a clipped wing, and could not follow. After the swarm had been gone about 5 minutes my wife went to see if she could find the old mother queen, and found her with a little cluster of bees in front of the hive. Not knowing what else to do with her, she allowed the queen to enter the old hive she came from, supposing the swarm had been joined by

a virgin queen from some of the nuclei, as it was the proper time of day (2 p.m.) for them to be flying. So wife returned to the house, thinking the swarm was lost. But about 20 or 30 minutes later she heard a loud roaring down at the bee-yard, and lo, and behold! the swarm had returned and was entering the hive they came from.

On my return I found they had destroyed all queen-cells, and the old queen had gone to laying, and all idea of further swarming was given up.

The two points that are new to me in the above are, 1st, I never had bees go off and stay so long without any queen with them; and, 2d, I never had bees give up the idea of swarming when they had swarmed once, when both honey and pollen were coming in plentifully.

Rescue, Tex.

L. B. SMITH.

A furtive glance from that effervescing mass of honey, to the countenance of the would-be honey-producer, assured me that the agitation in his mind was not excelled by that in the honey, and matters must be run smooth, else an eruption was imminent in which sulphurous fumes were likely to predominate. However, all I could suggest or conjure up was to convert that honey into vinegar. As to the prevention of a similar occurrence, I advised him not to be so over-anxious in assisting the bees, but let them take care of the honey a little longer. Their God-given instinct in the line of curing honey has as yet not been equaled by the tricks of man.

I remember A. I. Root telling of a woman who produced a very superior grade of honey, and, on investigation, it was ascertained that its superiority was wholly due to the fact that the honey was always left on the hives for the bees to perfect its curing. I felt proud of the fact that it was a *sister* that had earned such a reputation, and that there was nothing in the way of other sisters "going and doing likewise."

Quite frequently women are accused of having so much curiosity that they can not let well-enough alone, but must go on a tour of investigation and do more harm than good in a hive of honey-bees. I am pleased to say that in the case under consideration the culprit was a *man*. (By the way, were it possible to weigh the curiosity of both sexes, I wonder which would over-balance?)

Curiosity, however, is a good thing if not abused, as the phrenologists would express it; while it leads us into many a mishap, it also causes us to stumble into success.

The birth of many a bee-keeper was instigated by a spirit of curiosity to ascertain beyond a doubt if he or she could handle bees with that ease, facility and ability that marks the doings of the initiated. And had it not been for the much-ridiculed attribute, "curiosity," these selfsame successful men and women who have remained in the great aggregation of the unknown, and the good they have done to the world to the extent of their bee-keeping, would have been curtailed.

Beginners may have a crumb of comfort in the knowledge that mistakes are not confined to them, as "old stagers" will testify. But a few days ago I was disagreeably surprised by a doleful song which was about as follows:

"What was the matter with that last 480 pounds of honey sent! Off color and strong. I think you surely must have bought it of some of your neighbors to ship to me. I have built up quite a reputation for shipping in good honey, and please do not send me any more like that. I would sell a can to a man one day and the next he would bring it back, declaring he never saw such stuff, and wanted none of it, etc. Obligated to sell it at a loss."

All this referred to the last shipment of 1905. The honey was of the fall product, and nothing wrong with it except dark. I had given instructions that none of it be shipped, and if not sold at home under personal inspection it was to be kept in stock for spring



Conducted by EMMA M. WILSON, Marengo, Ill.

A Beedom Neighborhood's Experiences

(Permit me to say, parenthetically, that I usually flatter myself into the belief that every one is my friend, unless I have been positively otherwise convinced.) I suppose a passport to your charming circle is unnecessary since Editor York, and Editress Miss Emma Wilson, have repeatedly sent out invitations to each and all to enter therein.

A rocker? Oh, no, thank you. Cushioned rockers are not for me. A low hassock at the feet of Miss Wilson will admirably answer for the use of one of the most common of common women. A feeling that selfishness is a bar to knowledge and good citizenship, prompts me to bring my humble offerings.

"The soul that gives
Is the soul that lives;
And he that beareth another's load
Doth lighten his own and shortens the way,
And brightens the homeward road."

Because of the world being much the same all over, neighborhood experiences are oftentimes of wide interest, so I begin with some of the happenings hereabouts.

REMOVING HONEY FROM HIVES TOO SOON.

About the middle of May, a friend told me that a mutual friend had sent her some comb honey.

The middle of June, in this locality, is early for beginning the "robbing," as the operation of taking surplus is termed. I could not help smiling, as I knew *his* was a first experience in the

taking of honey. I said little, but thought the more; talk in this instance would have been a simple "casting of pearls before swine," as the mutual friend was very self-confident. I felt satisfied a little later on that old master, Experience, would step in with his exorbitant bill; but I was equally satisfied that in no other way could the lesson be taught.

Surprising that cheap things are discarded because they are cheap, and that we American people are never so well pleased as when we've "paid too dear for the whistle."

After the mischief has been done much after the manner of calling the physician, I was appealed to as to the cause of the trouble and remedy therefor. The honey had not only been taken in an unripe stage, but had also been placed in a damp cellar for "protection." Alas, "misfortune followed fast." An offensive acid smell announced that fermentation had set in; the delicate cappings were broken, and a watery liquid was trickling over the once beautiful white faces of the sections, as though weeping over such untoward destruction. I was forcibly reminded of an article which I had but recently read, and which ran something like this:

"Two elements are always battling for supremacy; they permeate all things. One builds, the other destroys; one is intelligence, the other ignorance; one is sunlight, the other darkness; one is spiritual, the other animal; one is Dr. Jekyll, the other Mr. Hyde; one is God, the other Devil. The latter seems to be sitting upon the high places of the earth and gaining the mastery of the situation."

American Bee Journal

feeding. Through the carelessness of a driver, who over-looked the lot intended to be shipped, and substituted the dark honey, several innocent people suffered; and just when the cost of this mistake will be fully cancelled it is hard to calculate.

I feel assured that "Experience" will make no exception of this case,

but will fully sustain his honestly earned reputation for excessive charges.

Thus, time and again, I am paying for these little lessons, which goes to show that unless one is anxious to become his own executioner in the honey-trade, he must never forget that the price of life is "eternal vigilance."

Miami, Mo.

MARY E. NULL.



Conducted by MORLEY PETTIT, Villa Nova, Ont.

More Ontario Honey-Crop Reports

A. Pickett, Kilbride, July 23.—I shall not have much white honey save from the basswood, which the bees began to work on a few days ago. I will have only about $\frac{1}{2}$ of a crop. I had very strong colonies to begin with, and got a little honey from fruit-bloom, also dandelion, which is very dark and scarcely fit to offer for sale at all.

J. H. McCauley, Churchville, July 20.—I really believe we will not have $\frac{1}{2}$ of a crop of honey. Basswood is coming out nicely now, but the weather continues too showery and cool.

Alex Goodfellow, Macville, July 23.—Our honey crop is very poor—about 600 pounds of amber and about 700 pounds of white honey; no comb. The white honey has been coming in very slowly.

C. W. Challand, Marburg, July 24.—The honey crop is very short. I have not extracted a pound yet, but I think I will try to take off 100 or 200 pounds for home trade. Buckwheat is not good with me.

Josiah Reaman, Carrville, July 18.—I have taken about 600 pounds of dark honey, which I have not done for some years in the forepart of the season. I have also taken about 100 sections, and they are nice and white, as usual. The linden is in bloom now, but it will not be a full flow, and if it is mixed with the dark honey now on the hives, I will not have as nice honey as last year, and not nearly so much. It rained here the last 2 weeks in June and the first week in July nearly all the time, with thunder-storms at that, and such are not good for a honey crop.

D. Smith, Thedford, July 21.—All kinds of honey are a failure in this section.

W. J. Moore, Rock Spring.—White honey is a failure.

Wallace Smith, Westminster.—Not much of a honey crop.

C. J. F. Switzer, Orangeville, July 14.—The indications are that the honey crop will be light. I have not extracted any yet.

John Thomas, Arthur, July 14.—This is the best season for clover honey for many years. Basswood also promises well.

A. Fyfe, Harriston, July 14.—I will not have half a crop of honey. I have not extracted any yet. Basswood is just in bloom.

C. Grimoldby, Owen Sound, July 10.—The season so far has been very bad, but it is improving somewhat. I do not expect much of a crop.

H. T. Roberts, McIntyre, July 11.—Our white honey will be a good medium, I think. The flow at present is very good—if it only lasts.

Edwin Dalton, Tansley, July 10.—The clover honey crop here will be very light, but the prospects for basswood are good. My bees have not done well, particularly the last week or so. Adjoining apiaries are complaining of a short honey crop.

John Pirie, Drumquin, July 13.—The honey crop is about a total failure, with a fair amount of clover.

W. Couse, Streetsville, July 9.—We have not 500 pounds of honey from 130 good, strong colonies, and we do not get any dark honey, so our outlook is for bread and butter from some other source.

W. A. Caldwell, Bolton, July 14.—We never have had so poor a honey season. I do not expect over $\frac{1}{2}$ of a crop.

R. C. Baillie, Eglington, July 10.—We do not expect to have more than about $\frac{1}{2}$ of our usual crop of light honey—about 25 pounds per colony, and all extracted.

Jas. E. Holt, Newton Robinson, July 14.—The prospects at present are very poor for a crop of honey of any description. I have not extracted any yet. Hardly any swarming, and the colonies are not as populous as they should be at this date.

Denis Nolan, Newton Robinson, July 12.—We may get 30 pounds per colony, and we know of no better crop in this vicinity.

Smart Bros., Collingwood, July 13.—There is very little light honey in the supers yet. Clover is about over, and basswood is just coming into bloom.

B. Davidson, Uxbridge, July 10.—White honey here is the same as a failure, and all through this section.

J. W. Sparling, Bowmanville, July 12.—I might say that the honey crop is a total failure here.

John Truck, Port Hope, July 13.—White honey here is almost a total failure. I never saw as light a crop in the 21 years we have kept bees. No swarms with us.

A. H. Noble, Cresswell, July 14.—White honey is a total failure here.

E. G. Hand, Feneelon Falls, July 14.—Clover is good, and promise of basswood.

J. C. Elliott, Carlton Place, July 12.—White clover is almost a total failure here. Basswood promises well; just opening now.

Geo. Laing, Milton, July 17.—Prospects are for a light honey-yield here. I have taken off over 2000 pounds of not very light honey. Bees are doing well now, and getting fine honey, but it being so late in the season it will not last very long.

Alex Dickson, Lancaster, July 17.—The prospect for a honey crop in this section so far is a failure. The spring was too cold. The honey-flow started and stopped, and

brood-rearing stopped also, which was the cause of not much doing now.

J. A. Colson, Purbrook, July 17.—The season is late, and the honey crop light.

Geo. A. Howard, Lynden, July 14.—Clover has yielded but very little honey here. The best colonies which did not swarm have about filled one 8-frame super. The weather conditions appear to be about right for nectar-secretion yesterday and to-day, and the bees are storing a little from basswood.

A. Laing, Ash, July 12.—Clover is giving me practically nothing. Basswood is showing fine, and I am hoping for an old-time down-pour from that source, but it is extremely uncertain.

H. R. Rowsome, Burlington, July 13.—There is no white honey here.

Chris. Edmondson, Brantford, July 14.—White honey is a very light crop—not more than 15 or 20 pounds per colony.

J. W. Clark, Cainsville, July 12.—Bees have done very little so far. Unless we get a good flow from basswood the honey crop will be a total failure this season.



Send Questions either to the office of the American Bee Journal, or Dr. C. C. MILLER, Marengo, Ill. (Dr. Miller does not answer Questions by mail.)

Tank for Extracted Honey

I want to get a tank for extracted honey. What would you advise me to get—a wooden or galvanized-steel tank? Where could I get such a tank? WISCONSIN.

ANSWER.—Galvanized steel or iron is the material generally used for such a tank. I don't think I ever saw one quoted in a price-list, and you will probably have to get it made by your local tinner. It will be well for you to read the excellent article written by C. P. Dadant, on page 657.

Nucleus Method of Increase

I have a colony of Italian bees from which I intend to make some increase. If I make nuclei from it, will it be safe to give frames of brood with adhering bees from other colonies? Or is there danger that the bees will kill the queen or destroy the queen-cells? If this is not safe, how fast can frames of brood without bees be given? I understand if too much brood is given at once some will starve. IOWA.

ANSWER.—It requires judgment in giving frames of brood with adhering bees, as it depends upon the strength of the nucleus how much can be given at a time. You evidently have in mind the two dangers: One is that the strange bees introduced will kill the queen (there is not very much danger that they will harm the queen-cells); and the other is that the brood will be chilled or starved. Generally more danger of chilling than starving.

Unless a nucleus has bees enough to cover 3 frames, it is better not to introduce a frame of brood with adhering bees, lest the queen be endangered. With regard to brood, there is little danger of harm being done if bees enough go with it to cover it well, or if there are bees enough in the nucleus to cover an additional frame.

In any case, the more mature the brood the better, and if the brood is all sealed you may give a frame without any adhering bees, and

American Bee Journal

it will be safe in a nucleus of 2 or 3 frames, even if there appear to be only enough bees present to cover well the 2 or 3 frames already present. One reason for this is in the fact that it does not require so much heat for sealed as for unsealed brood. As soon as most of the young bees have emerged from the frames given, it can be exchanged for another, and this will generally allow you to add a frame each week.

A nice way to do to have frames of brood ready to give to nuclei is to put an excluder over a strong colony with an empty hive-body over it, and put into this frames of brood from other colonies; then a week or 10 days later, there being no young brood present, the frames will be fine for nuclei, whether you take with them the adhering bees or not.

Bees Trying to Rear a Queen from a Drone-Larva

I have a colony of bees that is rearing, or trying to rear, a queen from a drone-larva, or, rather, from an egg laid by a drone-laying queen. What will the result be?

This colony turned up queenless in the spring. I gave them a comb of brood and eggs in April. They proceeded to rear a queen, and turned out a very nice one, to all appearances; but she disappeared about the time for her to mate. I then gave her another comb of brood and eggs, from which they reared another queen. This was the drone-layer spoken of above. I removed this queen, and, as I supposed, all of her brood and eggs from the hive, and put in another comb of brood and eggs for them to work on.

In about 5 days afterward, on examination, I found I had unknowingly left a small patch of the drone-brood or eggs in the hive when removing the queen, and one large comb. Now, instead of starting queen-cells on the comb of worker-brood and eggs which I gave them, they commenced on the drone-brood, and have drawn out some fine, large cells which are now capped over and due to hatch inside of a week.

This queen I put in a nucleus, to try to find out if she would deposit worker-eggs later on, but her introduction was not a success. She laid nothing but drone-eggs, to my knowledge.

P. S. J.

ANSWER.—Bees which have nothing but drone-brood are likely to try to rear a queen from a drone-larva, the result being a drone which never emerges, but dies in the cell. But such cells are not likely to be what you would call fine-looking, but rather stubbed, smooth, and incomplete-looking. If the bees started a queen-cell with a drone-egg or a drone-larva while the drone-laying queen was present, there was nothing unusual about the case. But if they started the cell after the worker-brood was given them, and the cell contained a drone-larva, then it was very unusual. Of course, you will watch to see the result, and if there was a drone-larva in the case you may be sure the result will be nothing but a dead drone. If, however, a queen results, then it will appear that the bees have carried an egg from one comb to the other, all the time supposing that the queen-cell was on a comb in which only the drone-laying queen could have deposited an egg.

Slim Prospects for Late Honey

I have been looking over the surrounding country to see what are the prospects for a late honey crop. It looks slim, but with good rains and favorable weather we might get enough to winter the bees, and perhaps a little surplus.

E. J. BRYANT.

Elgin, Ill., Aug. 6.

Best Crop of Honey

I have a better crop of honey this year than I have had at any time during the past 8 years. I will have 400 pounds of sweet clover honey, quality the best, from 7 colonies, and no swarms.

G. W. NORRIS.

Cladlin, Kane., July 29.

No Surplus for Outside Markets

We had no surplus honey up to July 4. We got about 50 pounds per colony from basswood. We have had a drenching rain of late, and bees are working hard on sweet clover now. There will be no surplus honey here for outside markets this year.

J. W. JOHNSON.

Davis, Ill., Aug. 7.

Bees Have Done Well

I am very much interested in bees, and also in reading the American Bee Journal. My bees have done very well this summer, one colony producing 4 supers of honey containing 28 sections each, and one 10-frame shallow super, and are still working. It didn't swarm at all.

JOHN L. SIMS.

Williamstown, Mich., Aug. 4.

Poor Season in Florida

Last year bees were an absolute failure here, and I fed 12,000 pounds of sugar syrup to keep them from starving. This year was fairly promising, but the excessive and continuous rains have caused it to be almost a failure. I have about 5 pounds per colony on the average in surplus honey. Bees 200 miles further south have done much better. The flow came before the rains. Also, in western Florida, where the source is entirely different, there was honey. Here many colonies did not give an ounce, the very strongest a few pounds—mostly extracted.

A. F. BROWN.

Bulow, Fla., Aug. 8.

Protracted Drouth—No Honey

In this locality white clover begins to yield nectar the last week in May. This season we have had a protracted drouth, and the bees have gathered but little nectar since the last week in May, which has necessitated feeding.

Sweet clover makes but very little start in this locality; for some reason it fails to flourish. I learn that in the vicinity of Aurora bees are getting some surplus from sweet clover.

In northern Illinois "pigeon" and "fox-tail" grasses flourish; in this locality these grasses are rare; late fall warmth germinates most of the seed, which gets killed before it can mature more.

The Dadants have an exceptional locality for this vicinity, being on the Mississippi River.

WM. FINDLAY.

Basco, Ill., July 30.

Queen-Clipping Device Free!

The MONETTE Queen-Clipping Device is a fine thing for use in catching and clipping Queens' wings. It is used by many beekeepers. Full printed directions sent with each one. We mail it for 25 cents; or will send it FREE as a premium for sending us One New subscriber to the Bee Journal for a year at \$1.00; or for \$1.10 we will mail the Bee Journal one year and the Clipping Device. Address, GEORGE W. YORK & CO., CHICAGO, ILL.



QUEENS

BY RETURN MAIL

Golden or Leather-Colored Italian

A few unsolicited testimonials showing what Quirin's queens are doing:

Our folks say that your queens are extra-line.

The A. I. Root Co., Medina, Ohio.

We have good reports from your stock from time to time.

George W. York & Co., Chicago, Ill.

On every hand I hear good words of Quirin's queens.

B. S. K. Bennett, Los Angeles, Calif.

Your queens did finely. It was one I purchased last year that gave me over 400 pounds of honey.

J. L. Gandy, Humboldt, Nebr.

The breeder is surely a very fine one; her daughters do grandly.

Campbell & West, Haristown, Pa.

I had a queen of your last year which produced bees that beat anything ever seen in this part of the country.

E. L. Messenger, New Haven, Conn.

The nuclei you sent J. A. Adams did just splendidly. Each colony stored at least 75 pounds of honey.

F. P. Merritt, 13 Breckenridge St., Lexington, Ky.

A few years ago I bought a queen from you which proved to be the best I had for years.

H. C. Shirley.

Cashier of Liberty Bank, Liberty, S. C.

I have had the pleasure of seeing the results of your queens at Mr. George W. Stanley's apiary, at Scuffletown, Ky., and that is why I am ordering this half dozen.

C. W. Brenner, Newburg, Ind.

I bought a queen from a neighbor last year who said he got her from you. She made for me 193 sections of honey after July 4—the best my other queens did was 64 sections.

C. E. Woodington, St. Anne, Ill.

With great respect I write to you in regard to your dealing and queens. If you want any references you can refer to me, as I can't recommend you too highly. Your queens are the best I ever saw. I have one hive of bees among my 45 colonies containing a queen from you that \$50 will not buy.

Morris Coon, Route 2, Locke, N. Y.

Prices balance of season	1	6	12
Select queens.....	75	\$4.00	\$7.00
Tested queens.....	1.00	5.00	9.00
Select tested queens.....	1.50	8.00	15.00
Breeders.....	3.00	15.00	
Straight 5 band breeders	5.00		

Safe delivery and satisfaction guaranteed of all queens. Any queen not satisfactory may be returned any time inside of sixty days and another will be sent gratis.

Address all orders to

Quirin-the-Queen-Breeder

BELLEVUE, OHIO

This ad. appears every two weeks.

Mention Bee Journal when writing.

Rose Lawn Queens

"Beauty Is Skin Deep" Results Count

A customer in Pennsylvania writes: "The Pure Gold queen you sent me has 9 frames full of sealed brood. I would not take \$100 for her. Send me another like her."

From an Indiana bee-keeper: "I have handled queens for 20 years, but the Golden you sent me is the largest, finest and most prolific I ever saw. Please send me 3 more as soon as possible."

From Illinois: "I never saw bees work Red Clover until to-day when I counted more than 20 on Red Clover blooms in my yard. They came from the hive containing the Red Clover Queen bought of you."

Plenty of these queens for you. Get good stock. A request will bring cage containing sample workers of any race we have.

Requeen now and have plenty of early brood next spring.

Italians and Carniolans—Untested, 75c; 6 for \$4. Tested, \$1; 6 for \$5.

Caucasians and Banats—Untested, \$1; 6 for \$5. Tested, \$1.50; 6 for \$8.

ROSE LAWN APIARIES,

33A4t STA. C. LINCOLN, NEB.

Mention Bee Journal when writing.



Plenty of Rain—Fall Flowers

We are having plenty of rain now, and bees are starting on fall flowers. Buckwheat is just opening up; white clover is also popping up here and there.

H. G. QUIRIN.

Bellevue, Ohio, Aug. 9.

American Bee Journal

'If Goods are wanted Quick, send to Pouder'



BEE-SUPPLIES

Root's Goods at Root's Prices

Everything used by Bee-Keepers.
POUDER'S HONEY-JARS. Prompt Service.
Low Freight Rates. Catalog Free.

BEESWAX WANTED

I pay highest market price for beeswax, delivered here, at any time, cash or trade. Make small shipments by express; large shipments by freight, always being sure to attach your name to the package. My large illustrated catalog is free. I shall be glad to send it to you.

WALTER S. POUDER,

513-515 Massachusetts Ave., INDIANAPOLIS, IND.

Mention Bee Journal when writing.

CAUCASIAN QUEENS!

I can furnish a limited number of Queens of this popular variety, bred from a Tested Queen sent me by the Agricultural Department, all mated in a mating yard away from all other bees, so that all of my Queens will be almost sure to be purely mated. These choice Queens only \$1.00 each. **C. W. PRICE**
29Atf L.B. 484, SPIRIT LAKE, IOWA.

Queens By Return Mail

Queens from our fine strain of 3-band Italians will not disappoint you; bees are gentle and the best of honey-gatherers. Queens are large and prolific, and every one guaranteed. Untested, 50c, \$6 per doz. Tested, \$1 each

J. W. K SHAW & CO.

19Atf LOREAUVILLE, Iberia Co., LA.

10 weeks for
10 Cents

The Farmers' Review
CHICAGO

A weekly paper for practical farmers. No shirt-sleeve editing but correspondence from actual farmers relating practical experiences. Fully illustrated and printed on good paper. Sent on trial 10 weeks for 10 cents. Address,

FARMERS' REVIEW

1001 Ellsworth Bldg., CHICAGO, ILL.
29A7t Please mention the Bee Journal.

GOLDEN AND LEATHER-COLORED ITALIANS

Price of Golden Queens. Before July 1st: Untested, \$1 each; 6 for \$5; 12 for \$9. Warranted \$1.25 each; 6 for \$7; 12 for \$13. Tested, \$1.50 each. Select Tested, \$2. After July 1st: Untested, 75c each; 6 for \$4; one dozen, \$7. Warranted Tested, \$1.25 each; 6 for \$7; one dozen, \$13. Tested, \$1.50; Select Tested, 2; Breeders, \$5. Caucasian Queens will be ready to mail July 1st: Untested, \$1 each; 6 for \$5. Warranted Tested, \$1.40 each; 6 for \$8.

We have three yards—two Italian and one Caucasian—and mean to meet the demand of the trade. Prices of Nuclei on application.

29Atf D. J. BLOCHER, Pearl City, Ill.
Mention Bee Journal when writing.

WE SELL ROOT'S GOODS IN MICHIGAN
Let us quote you prices on Sections, Hives, Foundation, etc., as we can save you time and freight. Beeswax Wanted for Cash.

M. H. HUNT & SON,
BELL BRANCH, WAYNE CO., MICH

Please Mention Bee Journal
when writing advertisers.

WE WILL BUY

New Crop Honey, comb and extracted, in any quantity. If you have a crop to dispose of, write us fully as to quality, quantity, style of package, etc., and you will have our answer by return mail. If we should fail to come to an understanding as to price, we may arrange to handle your crop on consignment, feeling confident that we can do you justice in every respect.

WE WILL SELL

to Bee-Keepers, whose crop is not large enough to supply their trade, various grades Honey. Let us know your wants and we will do our best to satisfy you.

BEESWAX

We are in the market to buy Beeswax at any time of the year. Write us when you have any to sell.

HILDRETH & SEGELKEN

265 & 267 Greenwich Street

NEW YORK, N. Y.

30Atf

American Bee Journal

Excellent Goods
Lowest Prices

Bee - Supplies

OF ALL KINDS

ESTABLISHED 25 YEARS

We have published **THE AMERICAN BEE-KEEPER** for 16 years (monthly, 50c a year.) The largest and best illustrated magazine of its kind for the price published. Edited by two of the most experienced bee-keepers in America.

Sample copy free.

Our large, illustrated Price-List of Supplies free on application. Address,

The W. T. Falconer Mfg. Co.
JAMESTOWN, N. Y.

Honey and + Beeswax +

CHICAGO, Aug. 6.—There is now offered some good lots of comb honey, and while the trade in it is not active, it is taken at 15¢@16¢ for fancy, 14¢@15¢ for No. 1, 12¢@13¢ for fancy amber, and 8¢@10¢ for fancy dark. Extracted is slow of sale with prices according to quantity and quality. White extracted, 6¼¢@7¢; amber, 5¼¢@6¼¢; dark, 5¢@5½¢. Beeswax, 30¢.

R. A. BURNETT & Co.

TOLEDO, July 30.—The market on comb honey at this writing is rather unsettled, as dealers are waiting to see what the market is going to do. There has not been very much honey offered as yet and bee-keepers seem to be holding their crop for a larger price. Fancy white comb would bring here in a retail way 14¢@15¢; some extra lots, 15¼¢; No. 1, 14¢, with very little demand for lower grades. Extracted white clover in barrels would bring 6¢@5½¢; cans the same. Beeswax 26¢@28¢.

GRIGGS BROS.

INDIANAPOLIS, July 28.—Fancy white comb brings 16¢@17¢ readily; No. 1, white, 2¢ less per pound; the demand is not supplied, but higher prices would decrease the demand. Best grades of extracted honey bring 8¢@9¢. Good average beeswax sells here at \$33 per 100 pounds.

WALTER S. POWDER.

PHILADELPHIA, Aug. 9.—Advices from different points are rather conflicting in regard to the honey crop this season, and, consequently, there is no market price established. Some new arrivals of comb honey sell at 13¢@15¢, according to quality, and extracted at 6¢@7¢. Beeswax firm, 28¢.

We are producers of honey and do not handle on commission.

WM. A. SELSER.

NEW YORK, July 10.—We still have some demand for comb honey, mostly for white grades, which sells at from 13¢@14¢, according to quality. A very limited demand for light amber, with sufficient supply, and prices ruling at about 12¢. Extracted in fairly good demand, with sufficient supply to meet all requirements. Quite some arrivals from the South, and common grades are selling at from 50¢@58¢ per gallon, and better grades at from 60¢@65¢ per gallon. California strong, and white is selling at from 7¢@7½¢, and light amber at from 6¢@6½¢. No near-by honey in the markets as yet. Beeswax steady at 30¢ per pound.

HILDRETH & SORLEEN

Headquarters for Bee-Supplies

WANTED—HONEY

White Clover Extracted and Comb. Mail sample and state lowest price expected, delivered in Cincinnati. We pay cash on delivery.

Let me
book your
Order for

QUEENS

bred in separate apiaries,
the **GOLDEN YELLOWS, CARNIOLANS, RED CLOVERS** and **CAUCASIANS**.

For prices, refer to my catalog, page 29.

C. H. W. WEBER

CINCINNATI
... OHIO ...

Office and Salesrooms, 2146-48 Central Ave. Warehouses, Freeman and Central Aves.

CINCINNATI, Aug. 3.—Comb honey finds ready sale here for fancy and No. 1 at 14¢@15¢ per pound in a jobbing way. This is a poor market for grades lower than No. 1. The receipts of extracted honey are normal, although the demand is not so good as it was 60 days ago. Nevertheless, there is no material change in prices. Selling amber in barrels and cans at 5¢@6¼¢; fancy white at 6¼¢@8¼¢. For choice beeswax, free from dirt, 30¢ per pound, delivered here.

THE FRED W. MUTH CO.

DENVER, July 30.—Some small lots of new comb honey coming in now; crop promises to be light. At the present we are selling No. 1 white at \$3.25 per case of 24 sections; No. 2 at \$3. We are paying 24¢ per pound for clean yellow wax delivered here.

THE COLO. HONEY-PRODUCERS' ASSN.

KANSAS CITY, Aug. 9.—On account of the heavy receipts of all kinds of fruit, the demand for honey, both comb and extracted, is very limited. We are quoting No. 1 fancy white in 24 sections at \$3; No. 2, at \$2.75. There is no new extracted in market; old stock is selling at 5¼¢@6¢. Beeswax, 25¢. C. C. CLEMONS & Co.

CINCINNATI, July 21.—We are having new comb honey to arrive and it finds ready sale; fancy white at 14¼¢; and No. 1 at 13¼¢. Extracted, white clover, in barrels, at 7¼¢; in cans, 8¼¢; amber, 5¼¢@5½¢. Beeswax, 30¢.

C. H. W. WEBER.



Wanted

To sell lot of 300 empty 60-lb. capacity Honey-Cans. All in one lot, or less quantities. Cans are in first-class condition.

We are also in the market for Fancy Comb and Extracted Honey. Correspondence solicited.

Michigan White Clover Honey Co.

AGENCIES: DETROIT, MICH.

35 So. Delaware Street, Indianapolis, Ind.

150 E. Jefferson Street, Louisville, Ky.

643 Broadway S.E., Cleveland, Ohio.

21A13t Please mention the Bee Journal

65c for 12 Names For names and P. O. of 12 farmers and 15¢ stamps taken—we will send for 2 yrs. the Farmer's Call—reg. sub. price 40¢ a year. P. C. is a wkly., 25 years old, 1,300 pages a year. Sample free.

FARMER'S CALL, Quincy, Ill.

Please mention Bee Journal
when writing Advertisers.

HONEY AND BEESWAX

When consigning, buying or selling, consult

R. A. BURNETT & CO.

199 SOUTH WATER ST. CHICAGO, ILL.

WANTED

To hear from parties with their lowest cash price, delivered here, for fancy comb honey in no-drip shipping cases; also extracted honey. We are cash buyers, and remit on receipt of goods.

THE FRED W. MUTH CO.

27A1f 51 Walnut St., CINCINNATI, OHIO.

Mention Bee Journal when writing.

The Emerson Binder.

This Emerson stiff-board Binder with cloth back for the American Bee Journal we mail for but 75 cents; or we will send it with the Bee Journal for one year—both for only \$1.50. It is a fine thing to preserve the copies of the Journal as fast as they are received. If you have this "Emerson" no further binding is necessary.

GEORGE W. YORK & CO.,

334 Dearborn Street, CHICAGO, ILL.

WANTED

To buy for cash, Fancy Comb and Extracted Honey.

R. A. HOLERAMP,

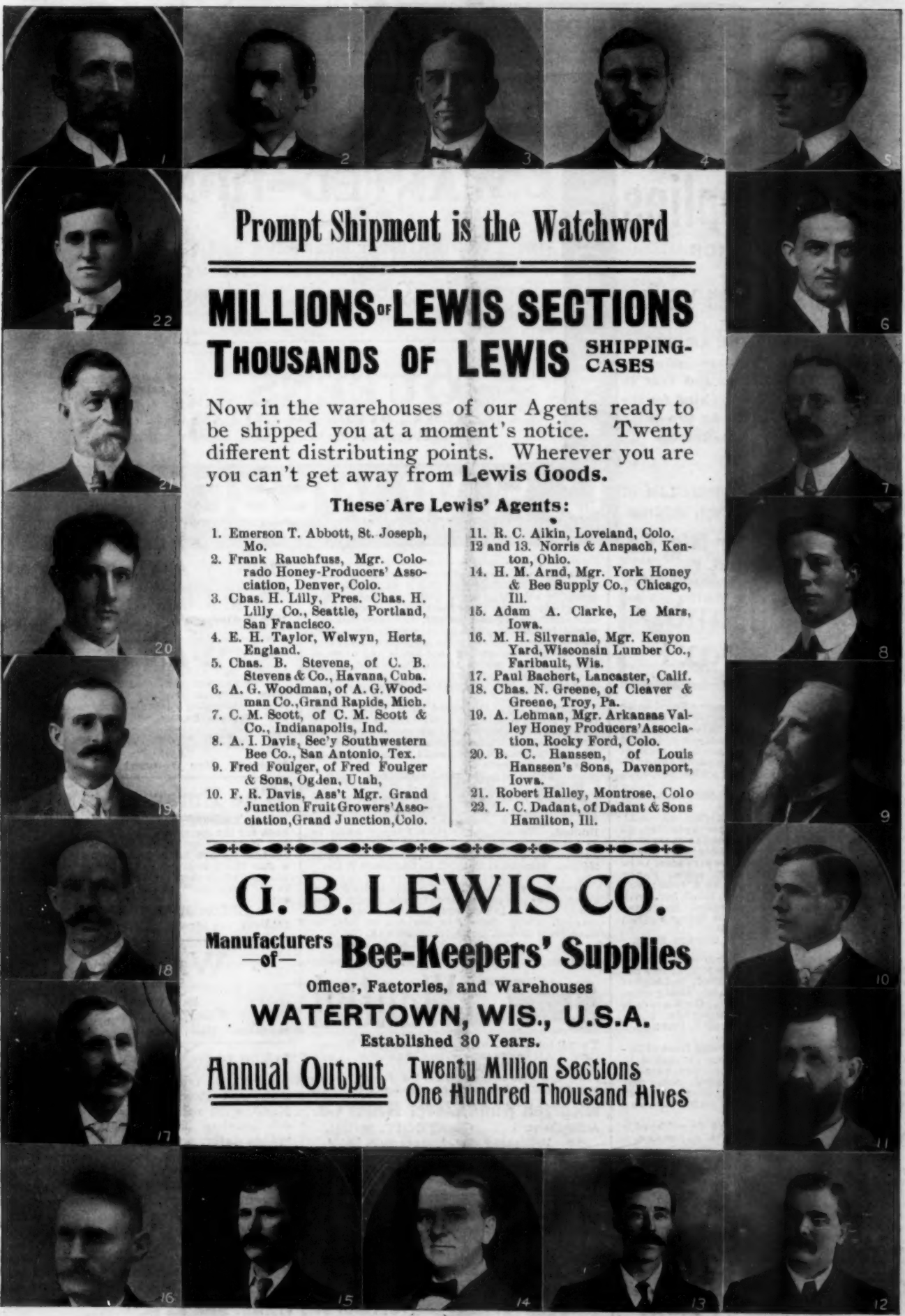
31A13t 4263 Virginia Ave., St. LOUIS, MO.

Mention Bee Journal when writing.

\$18.00 to New York City and Return

plus \$2.00, from Chicago, on August 28th and 29th, via the Nickel Plate Road, with return limit of September 4th leaving New York City. Three trains daily, with modern equipment. Individual Club meals, ranging in price from 35 cents to \$1.00, also a la carte and Mid-day Luncheon 50 cents, served in Nickel Plate dining-cars. Call on or address, John Y. Calahan, General Agent, 107 Adams St., Chicago. 2s—32A3t

"The continuous advertiser gets the bulk of the business, because others are not advertising, and he is."



Prompt Shipment is the Watchword

MILLIONS OF LEWIS SECTIONS THOUSANDS OF LEWIS SHIPPING-CASES

Now in the warehouses of our Agents ready to be shipped you at a moment's notice. Twenty different distributing points. Wherever you are you can't get away from **Lewis Goods**.

These Are Lewis' Agents:

- | | |
|--|---|
| 1. Emerson T. Abbott, St. Joseph, Mo. | 11. R. C. Aikin, Loveland, Colo. |
| 2. Frank Rauchfuss, Mgr. Colorado Honey-Producers' Association, Denver, Colo. | 12 and 13. Norris & Anspach, Kenton, Ohio. |
| 3. Chas. H. Lilly, Pres. Chas. H. Lilly Co., Seattle, Portland, San Francisco. | 14. H. M. Arnd, Mgr. York Honey & Bee Supply Co., Chicago, Ill. |
| 4. E. H. Taylor, Welwyn, Herts, England. | 15. Adam A. Clarke, Le Mars, Iowa. |
| 5. Chas. B. Stevens, of C. B. Stevens & Co., Havana, Cuba. | 16. M. H. Silvernale, Mgr. Kenyon Yard, Wisconsin Lumber Co., Faribault, Wis. |
| 6. A. G. Woodman, of A. G. Woodman Co., Grand Rapids, Mich. | 17. Paul Bachert, Lancaster, Calif. |
| 7. C. M. Scott, of C. M. Scott & Co., Indianapolis, Ind. | 18. Chas. N. Greene, of Cleaver & Greene, Troy, Pa. |
| 8. A. I. Davis, Sec'y Southwestern Bee Co., San Antonio, Tex. | 19. A. Lehman, Mgr. Arkansas Valley Honey Producers' Association, Rocky Ford, Colo. |
| 9. Fred Foulger, of Fred Foulger & Sons, Ogden, Utah. | 20. B. C. Hanssen, of Louis Hanssen's Sons, Davenport, Iowa. |
| 10. F. R. Davis, Ass't Mgr. Grand Junction Fruit Growers' Association, Grand Junction, Colo. | 21. Robert Halley, Montrose, Colo. |
| | 22. L. C. Dadant, of Dadant & Sons Hamilton, Ill. |

G. B. LEWIS CO.

Manufacturers **Bee-Keepers' Supplies**

Office, Factories, and Warehouses

WATERTOWN, WIS., U.S.A.

Established 30 Years.

Annual Output Twenty Million Sections
One Hundred Thousand Hives